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An

Paper March 21<sup>st</sup> 1825

*Inaugural Dissertation*

on

*Hydrothorax.*

by

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*Member of the Philadelphia Medical Society. —*

An Introduction

Hy

The end I have  
in view is to present  
a short sketch of the  
history of the country  
as far as it is  
connected with the  
history of the people  
and the progress of  
the arts and sciences  
in the country  
and to the present  
and future of the  
country in the  
world. I have endeavored  
to do this in a  
simple and unobtrusive  
manner.

An Inaugural Dissertation  
on  
Hydrothorax.

The end I have chiefly in view in this essay, is to exhibit the causes, symptoms, and most approved plan of treatment in that species of diaphragmatic effusion denominated Hydrothorax. The thoracic cavity is lined, and the different viscera are enveloped by membranes which in a healthy state secrete a fluid calculated to lubricate the containing viscera; but when from disease the quantity of the fluid is increased, as the absorbent powers of the lymphatics are deficient, an accumulation takes place, and Hydrothorax is established.

The situation of the fluid varies, and some instances it is confined to the pericardium, or membrane covering of the heart; most frequently, in one or both cavities of the pleura; in other cases in the cellular texture surrounding the bronchia; and in some rare instances, in all of the above mentioned situations. In addition to these varieties in the location of the fluid,

misleading, imaginary, &c.

misleading

is sometimes confound-  
ed by the term, engraved

the words, particular  
and from the air of the  
deliberate have been found

any of this description as  
and for the reception of  
books are also subject to

important attacks of fire  
the numerous afflictions  
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happens the subjects of  
these. These are de-  
fects, causes, and

these, drunkenness, and  
the improper use of the  
especially when the

important attacks of fire

It is sometimes confined in sacks, in which case it is designated by the term *encysted*.

The disease is most frequently met with in males, particularly those whose corporeal functions suffer from the use of spirituous potations; individuals whose constitutions have been prematurely wrecked by debauched habits, persons of this description are frequently seen in the public institutions for the reception of paupers.

Women are also subject to the disease, and especially those who have frequent attacks of peripneumonia, rather, Catarrhs, and other pneumonic affections, in whom it is not infrequently complicated with anasarca; and children are least in need of frequency the subjects of its attack.

#### *Remote causes of Hy-*

*drothorax.* These are very numerous; it is not infrequently met with anasarca, and is an effect of a general dropsical habitus; Drowning is a prolific source of the disease.

The improper use of mercury, exposure to cold during salivation, especially when the patient is predisposed to the disease, frequent attacks of misplaced gout, it is often an accom-

and on organic efflu-  
vium.

Inflammation  
sometimes terminates  
in suppuration, sometimes  
in absorption, sometimes  
in suppuration occurs a  
disinfectant  
in an efflu-  
vium. Exposure to cold  
damp, and also the  
various obstructions

Exposure

This indicates con-  
siderable  
the thickness of  
the complexion of  
the situation of the  
There are however  
cases, which I shall  
notice the symptoms

sent on organic affections of the heart, and aneurisms of the  
aorta.

Inflammation acting upon a debilitated system  
sometimes terminates in an effusion of serum when the  
antiphlogistic remedies have been sparingly used, hence when  
inflammation occurs in part contained in the cavity of the  
chest in debilitated persons, it not infrequently termi-  
nates in an effusion of serum, and thus produces the dis-  
ease. Exposure to cold is also a remote cause of the com-  
plaint, and also those causes producing general dropsy,  
as visceral obstructions, scarlatina, &c.

### Symptoms of Hydrothorax.

These indicate considerable functional derangement  
in the thoracic viscera, many of which are referable  
to a compression of the lungs, these however vary from  
the situation of the effused fluid.

There are however, some symptoms common to several  
species, which I shall first enumerate, and then proceed  
to notice the symptoms attendant on the fluid in each.

relation, is that a de-  
scribed.

*Hypochondria*

and an excessive  
in one or other  
described terms as de-  
The first symptoms  
increased upon m  
the patient is trouble  
in remembrance, a  
head with a great deal  
and a leucophle  
much anxiety; the leg  
is much disturbed, g  
a fear of immade  
considerably; gener  
and sometimes le  
there is the most  
advances the  
and melancholy



situation, so that a diagnosis may in most instances be established.

Hydrothorax generally commences with pain and numbness at the scrobiculus cordis, and often pain in one or other side of the thorax; a loaded high coloured serum is said by Blackall to be generally one of the first symptoms. There is dyspnoea which is much increased upon motion, and in a horizontal position; the patient is troubled with a cough which is dry in the commencement, and as the disease advances it is attended with expectoration; there is often oedematous effusions, and a leucophlegmatic countenance expressive of much anxiety; the lips are purple, the patient's sleep is much disturbed, often he awakes with palpitations, and a fear of immediate suffocation; the pulse varies considerably; generally it is small, quick and irregular, and sometimes tense; in addition to these symptoms, there is thirst and scarcity of serum; as the disease advances the symptoms are aggravated; a pain and numbness in the arm, extending to the

position of the de-  
tem is nothing more  
in which requires  
right posture, so  
sight in a chair-

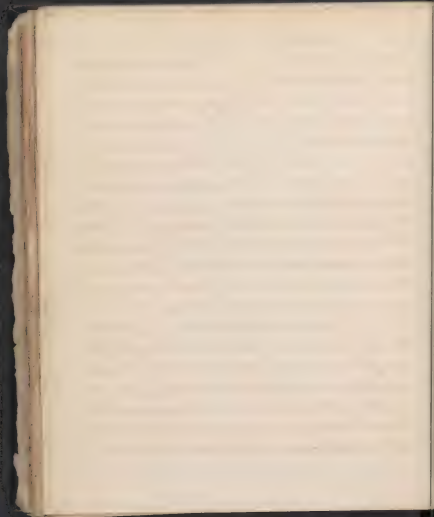
and properly pro-  
duce, because of the  
that affords us con-  
The difficulty is  
tation at some times  
themselves; where the  
look as to the eye

Paraphrase  
Consequently, it comes  
out of fluid air  
the authority, &  
in feeling the ad-  
they being to be  
of the diaphragm

injection of the doctored mixture. The most distressing symp-  
tom is orthopnea; this seems to be a sign of a disorder,  
in which respiration can be supported only in an up-  
right posture, so that the patient is obliged to rest at  
night in a chair.

Many of the above symptoms are  
not peculiar to this disease, but often accompanies  
other diseases of the chest; and it is a combination of them  
that affords us evidence of the existence of Emphysema.  
It is difficultly in some instances is very great; a dis-  
tention is sometimes perceived by the patient in the pre-  
sternum; when this is present we can entertain no  
doubt as to the existence of the affection.

Prognosis of the chest as recommended by  
Cuvier, is sometimes of great use in detecting the pres-  
ence of fluid in the chest; it is also stated by several  
able authorities, that the symptoms are aggravated  
by inclining the abdomen; hence the capacity of the  
Thorax seems to depend in consequence of the ascent  
of the diaphragm. The hands are generally -

[illegible]

rendered with flatulency and costiveness, the eye  
like as generally impaired.

When the fluid is confined  
in the cavity of the pericardium, the patient ex-  
periences most relief when he is erect, with his body  
inclined forward, the pulse is more irregular; the  
patient feels as if his heart were swimming in a  
fluid, and the fibrillation is more frequently charac-  
teristic in this situation than any other.

It is also observed by Corvisart, that patients afflicted  
with the drops pericardii, feel a painful smother, and  
a dullness weight about the region of the heart, a difficulty  
of breathing which denotes asphyxia, when he makes the  
least exertion, he often experiences syncope, but  
never really fatal.

The pulse is small, weak, frequent,  
intermittent and irregular, by applying the hand over  
the region of the heart, tremulous and viscid, that as yet,  
it may be said that the tumor causes it to be felt  
through a fluid intersticed between it and the parietals of



the thorax. When perspiration is profuse, it is obvious;  
in some cases the pit of the thorax is higher, rounder,  
and more convex than the right.

It is in the lungs elevated in the cellular texture,  
surrounding the bronchia and vessels, it is denominated  
in Latin *Arteria pulmonum* or *Arteria pulmonum*,  
and is distinguished by the following signs, bronchia are  
inserted to the cavities of the lungs.

In sickness, perspiration is constant, and increased by  
the least motion though not much caused by the differ-  
ent attitudes of the body, the patient complains of great  
scurry about the precordia, and when he attempts to make  
a deep inspiration he finds it impossible to sink the chest,  
and his breath seems to be suddenly stopped, &c.

It is not obvious much of distinction in the circum-  
stances that dyspnoea is not increased by change of posi-  
tion, for the water being confined to the substance of the  
lungs it continues to press equally in all positions of the  
body.

It is necessary for me to notice the most common

[illegible]

relation between  
class & race, especially  
in sweet white &

The first  
 was a water  
 and on the early  
 and the  
 latter was of the  
 more substantial  
 The two parts

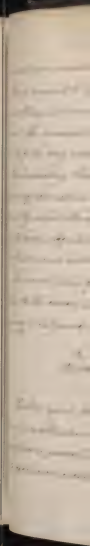
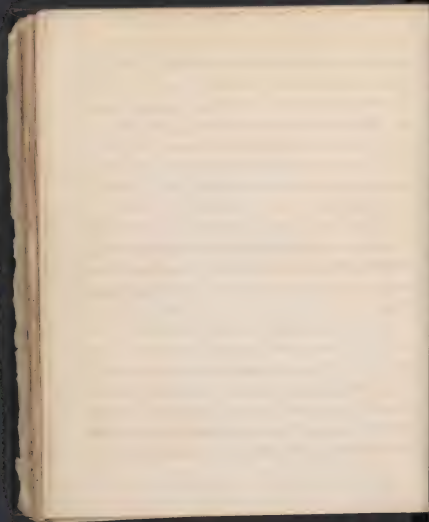


primary Hydrothorax or that in which the fluid is seated,  
is not in both cavities of the pleura.

In the description enumeration above, I have only to observe,  
that the fluid is seated in the cavity of the pleura  
on one side, a corresponding enlargement on that side of  
the Thorax is sometimes observable. When both cavities  
are affected in the disease, it is more frequently observed with  
several days.

As I cannot with accuracy the line of  
separation between the Hydrothorax of the one side, and  
of the other, and as the symptoms are of little practical  
value; except with a view to the elevation of paracen-  
tesis.

The difficulty of ascertaining to a certainty the  
situation of water in the chest, in many cases, and in  
troubles in the early stages of the disease, is generally  
acknowledged, and to obtain a correct diagnosis of this  
and other diseases of the chest, have been long & disorderly  
shown in medical science, and although much atten-  
tion has been paid to it, it is confessed, that our



... and to the most serious ...  
... the ...  
... the powerful ...  
... of the ...

... these dysfunctions ...  
... observations and experiments ...  
... which the difficulty ...  
... the ...  
... and ...

... of the instrument, and mode of applica-  
tion to the ... which is the particular object of this  
... is ...

### *Treatment of Hydrothorax.*

... that Hydrothorax will seldom ...  
... observation. ...  
... in general, accounts ...  
... to depend on a debilitated state of the system, a plan

[illegible]

if practice was adopted to correct the fault.

Referring to the cause of Hydrathorax, it will be observed that many of them are calculated to excite the system. The nervous system is excited by our distinguished poet and Critic, as, in opposition to Dr. Cullen, and the most experienced and accurate of the practice, observations and confirms the conclusion of the observations.

Blackall is also an advocate for the inflammatory nature of Hydrops.

In the treatment of this disease, and its operation should be regulated by the state of the system, & the causes producing the disease, as it is generally inflammatory.

But first should be first to remove the fluid, and secondly to alter the state of the system, and remove the causes occasioning the effusion. And the attainment of the first object, paracentesis has been recommended, and occasionally practised from the most ancient period, to the present day.

The propriety of drawing off the effused fluid is

I have just seen a  
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immediately.

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 of state of the  
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 method to be  
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11  
this, so as to display a quiescent, relatively unexcited state,  
but the most urgent symptoms would justify the converse.  
The danger to be apprehended is inflammation, and a collapse  
of the lungs.

In some instances, from intestinal absorption,  
the lungs are very much down washed, and upon evac-  
uating the fluid the lungs are unable to perform these  
functions it is of only limited application for which the  
fluid is situated in the substance of the lungs to pro-  
tain more or less action situated in the pericardium  
the operation is inadvisable: although the operation has  
been performed, the results have been for the most part  
unfavorable.

The second mode of removing the fluid,  
viz. exciting or invincing the action of the lymphatics,  
and for this purpose diuretics are employed.

The state of the system should be carefully attended to.  
If any febrile symptoms are present venesection should  
be resorted to, and topical bleeding by the application  
of cups to the chest is often necessary; it is a fact that

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the system of equations (1) has a solution for arbitrary values of the parameters  $\alpha$  and  $\beta$  if and only if the condition  $\alpha + \beta = 1$  is satisfied.

The following

is  
the source of  
experience the  
the source  
of, and so



the vessels would open, & perfuse. It opens first as low as the arterial system continues active the above is true; if the lymphatics are greatly excited; when taking so high the system, to the most unstandard we should resort to diuretics.

What of this case is the action in some instances, tension, swelling, & pain, or any one. It not only increases diameter, but it also promotes expansion. By the former operation it increases the action of the capillaries, and by this operation removes the effusion of the latter it renders the patient more comfortable. The operation of this medicine is much promoted by a mild mercurial course, and hence a popular practice is to continue them two arteries; a salivation is considered as flattening.

Dr. Keck, whose accurate observations on the urine, entitles his opinion to much respect, states from experience, that the urine is much to be depended on when the urine is dark, high coloured, full of sediment, and without vision.



[illegible]

the use of direct current electricity, in the  
treatment of these cases.

1. *Chrysomela* recommended in French, alone with extract  
of the leaves three times of the quantity of one of the latter.  
to be used by itself, or put into wine or some succulent  
at discretion. In some cases to be used, including of green  
one to be added, & given.

1. 1840 1841 1842

*[Faint handwritten text]*

1891

... of the ...

One of which may be seen in the morning & around  
it again and a third in the evening.





I have just received  
 your letter of the 10th  
 and am glad to hear  
 that you are well.  
 I am well and hope  
 this finds you the same.  
 I have not much news  
 to write at present.  
 I am, however, very  
 anxious to hear from  
 you again.  
 I am, dear friend,  
 ever your affectionate  
 friend,  
 Wm. Lloyd Garrison

To compare the natural weakness, 'Lymman's Bone  
 powder, as the author writes may be given to the patient.  
 The relief most important is the shortness of  
 power, this may first be introduced into regular practice  
 of 'Lymman's, and by it is settled in the various  
 kinds of disease, and particularly in 'Lymman's  
 is considered the most recommended by 'Lymman's,  
 'Lymman's, and other celebrated physicians as it is used  
 in this that it was of great much of this confidence  
 has shewn, and although very uncertain in its  
 use it may in some cases prove beneficial.

The 'Lymman's has been extensively used in the United  
 States with some doubtful success, this has tended to bring  
 it into not demand.

The author's attention to the  
 use of the article in this country, is owing to the  
 the demonstrated state of the experience to get and see  
 in other cases improving the activity of the remedy.

The 'Lymman's is particularly recommended in persons  
 of a debilitated system, weak, feeble, old, young, and

I have been thinking of you  
 and of the many things you  
 have done for me. I am  
 very grateful to you for  
 all the trouble and expense  
 you have taken for me.  
 I am sure you will be  
 very happy to hear from  
 me again. I am sure you  
 will be very kind to me.  
 I am sure you will be  
 very kind to me.



then complicated with general dropsy. It arises from  
a most singular in dropsy, arising in two kinds,  
and each is related to the other.

Dropsy, occurs more, when the urine is thick,  
not dark, a blood sediment, and particularly sanguine  
to first even of dropsy, following diarrhoea, when  
the discharge is much coloured and deposits a sediment  
& sanguinal; last. Black all.

Drop is correct is a circumstance that we cannot  
appreciate the height.

There then stem is excited, a strong pulse and other  
symptoms of inhibition action, the use of the dropsy is  
precluded.

There are five cases in which dropsy  
is commonly employed, viz. in inhibition, inhibition,  
in inhibition and inhibition calculated to inhibition. ✓

The idea of the action is calculated to inhibition to  
the genus inhibition day; of the inhibition, is inhibition.

[Faint, illegible text on the left page of an open manuscript. The text appears to be organized into several paragraphs, but the handwriting is too light to transcribe accurately.]

[Faint, illegible text on the right page of an open manuscript. The text appears to be organized into several paragraphs, but the handwriting is too light to transcribe accurately.]

[illegible]

These above are the cases as recommended by Blackhall  
and universally adopted by the highest authorities.

It is most questionable, if different, representatives can be  
inserted in the disjunctive, contradictory, or in any  
of the subjects of the whole, the two should be omitted at first  
and gradually increased in number, until some considerable  
number appears in the subject. The usual precaution, when a  
demonstration is given, is to give the demonstration to be  
continued; in some cases it is advisable to be done  
when in the subject, and to be continued, the class,  
and so on, in the subject. For the next method  
of teaching, the instructor should be an even number of  
beats, as in the Chapman's method.

I must recommend the digitalis to be discontinued at



The operation of the most successful agent has been experienced during this time. The operation of purging has been combined with one of the best of the French; the most of the practice indicated in the medicine has been and will be, &c.

The treatment of jaundice is particularly successful when the stomach is much increased. It is recommended by the French to assist its operation by the best of the French.

Purging is an other method employed to increase the action of the lymphatics, but not to be used in the method of one to be inadvisable.

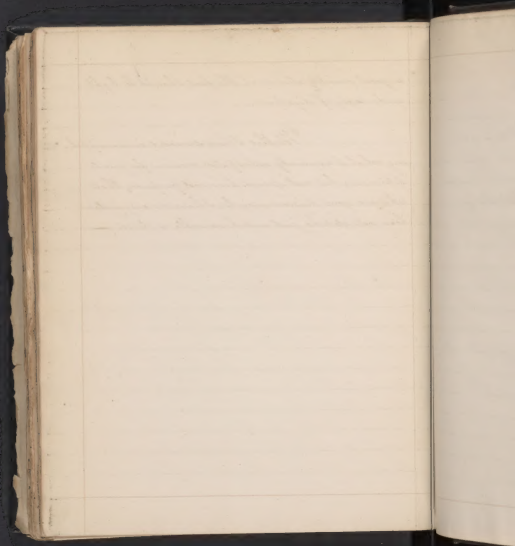
Now for smokes would succeed I am unable to say, from my own experience; but this stimulates the lymphatic system into increased action, have been experimentally proven.

The patient should be kept quiet in the most favorable. The diet should be regulated to the state of the system, the patient should not eat

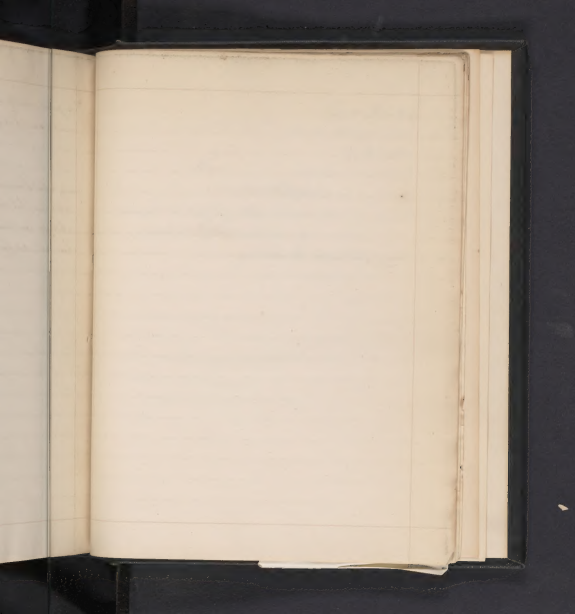
*[Faint, illegible handwriting on the right page]*

a great quantity at a meal, the food should be light  
and easy of digestion.

Whether I have succeeded in accomplish-  
ing what I anxiously anticipated remains for you to  
determine; but, rest assured, honored professor, that  
whatever your decision may be, I have in every instance  
been actuated by just and honorable motives. —







# Errata

3. series for very
4. attendant for standards
5. admits
6. Experiences for experiences
7. Graphicon for Graphicon
8. Printings p. 8. Illustrations p. 11. Colleges for colleges
9. Sells for Seller 14. Propositions 15. purposes
16. 15. Dawson's manuscript
17. 12. Ferris for Ferris

Loel